

WHAT IS CLAIMED IS:

1. A battery comprising:

a battery can;

a negative electrode plate for battery, said negative electrode plate having a paste-like material which contains an active material and which is provided on the entire surface of a rectangular conductive porous substrate including edge portions extending along long sides of the substrate, said negative electrode plate being wound in a cylindrical shape to be inserted into said battery can; and

a plate-shaped collector having ribs formed by raising part thereof, said ribs being resistance-welded to one of said edge portions of said conductive porous substrate while said paste-like material provided on said edge portions.

2. A battery as set forth in claim 1, wherein said plate-like collector has cut-out portions which are formed so as to extend in a radial direction inwardly from a periphery thereof, said ribs being formed by raising part thereof along both of radially extending edges of each of said cut-out portions.

3. A battery as set forth in claim 1, wherein $0.25 < R < 2.5$ is satisfied assuming that a specific electrical resistance of said conductive porous substrate is r_b , a thickness of said conductive porous substrate being t_b , a ratio r_b/t_b of r_b to t_b being R_b , a specific electrical resistance of said plate-like collector being r_c , a thickness of said plate-like collector being t_c , a ratio r_c/t_c of t_c to r_c being R_c , and a ratio R_c/R_b of R_c to R_b being R .

4. A battery as set forth in claim 3, wherein said conductive porous substrate is made of a steel, t_b being

in the range of from about 60 μm to about 80 μm , said plate-like collector being made of iron or nickel, and tc being in the range of from about 150 μm to about 200 μm .

5. A battery as set forth in claim 1, wherein said conductive porous substrate is made of a punching metal.

6. A negative electrode plate for a battery, wherein a paste-like material containing an active material is provided on the entire surface of a rectangular conductive porous substrate including an edge portion extending along a long side thereof, said negative electrode plate being wound in a cylindrical shape to be inserted into a battery can to be used a part of a better.